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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,376	12/08/2003	Haryanto Chandra	NSC1P288/P05766	4405
22434	7590	09/29/2005	EXAMINER	
BEYER WEAVER & THOMAS LLP			WOOD, KEVIN S	
P.O. BOX 70250			ART UNIT	
OAKLAND, CA 94612-0250			PAPER NUMBER	
			2874	

DATE MAILED: 09/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/731,376

Applicant(s)

CHANDRA, HARYANTO

Examiner

Kevin S. Wood

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13 is/are allowed.
- 6) ☒ Claim(s) 1,2,4-12,14,15,23,26 is/are rejected.
- 7) ☒ Claim(s) 3,16-22,24 and 25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/4/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **NON-FINAL REJECTION**

### ***Drawings***

1. The informal drawings are of sufficient quality to permit examination. New formal drawings in compliance with 37 CFR 1.121(d) are required when this application is allowed. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings.
2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the package to house the components (in claim 9 and claim 23) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites the limitation "the lens/mirror surface" in the tenth line of the claim. There is insufficient antecedent basis for this limitation in the claim. There has been no claim for a mirrored surface of the lens.

Claims 9 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 9 recites the limitation " a lens/reflector unit, a monitor photodetector chip, and a protective enclosure" in the tenth line of the claim. There is insufficient antecedent basis for this limitation in the claim. There has been no claim for a lens/reflector unit, a monitor photodetector chip, and a protective enclosure. How can there be a housing for enclosing devices or components that have not been claimed?

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 2, 4, 5, and 7-12 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,793,406 to Edwards et al.

Referring to claim 1, the Edwards et al. reference discloses all the limitations of the claimed invention. The Edwards et al. reference discloses an apparatus (10), comprising: a lens (36) fabricated from a single monolithic block of optically transparent material and configured to be used in a fiber optic transmitter (12), the lens including: a transmissive region (39) configured to transmit and focus light signals received from a light emitting source (45) onto a fiber optic cable when the lens is used in the fiber optic transmitter; and a reflective region (58) adjacent the transmissive region of the lens, the reflective region configured to reflect a portion of the light signal received at the lens/mirror surface; the transmissive region and reflective region being integrated and formed from the single monolithic block. See Fig. 1 along with its respective portion of the specification.

Referring to claim 2, the Edwards et al. reference discloses all the limitations of the claimed invention. The Edwards et al. reference discloses that the transmissive region (39) is substantially circular, spherical or aspherical surface curvature. See Fig. 1 of the reference.

Referring to claim 4, the Edwards et al. reference discloses all the limitations of the claimed invention. The Edwards et al. reference discloses the reflective surface (58) may be curved in order to focus the reflected light onto a pre-designated location. See Fig. 1 along with its respective portion of the specification.

Referring to claim 5, the Edwards et al. reference discloses all the limitations of the claimed invention. The Edwards et al. reference discloses a light reflecting surface (58) applied to the monolithic block (36). See Fig. 1 along with its respective portion of the specification.

Referring to claim 7, the Edwards et al. reference discloses all the limitations of the claimed invention. The Edwards et al. reference discloses that the single monolithic block (36) is made from plastics. See col. 3, lines 10-13 of the reference.

Referring to claim 8, the Edwards et al. reference discloses all the limitations of the claimed invention. The Edwards et al. reference discloses a photodetector (56) positioned to receive reflected light reflected off the reflective region (58) when light signals are received at the lens from the light-emitting source (45). See Fig. 1 and Fig. 2 along with their respective portions of the specification.

Referring to claim 9, the Edwards et al. reference discloses all the limitations of the claimed invention. The Edwards et al. reference discloses a package (20,48,47,43,42,40) to house the light source (45), a lens/reflector unit (49) a monitor photodetector chip (56), and a protective enclosure (50). See Fig. 1 and Fig. 2 along with their respective portions of the specification. The Edwards et al. reference clearly shows a package formed by the housing parts (20,48,47,43,42,40) for housing all of the claimed components.

Referring to claim 10, the Edwards et al. reference discloses all the limitations of the claimed invention. The Edwards et al. reference discloses a receptacle (20) for the purpose of providing optical connection to the outside world by aligning and holding firmly the end of the fiber optic cable (14). See Fig. 1 and Fig. 2 along with their respective portions of the specification.

Referring to claim 11, the Edwards et al. reference discloses all the limitations of the claimed invention. The Edwards et al. reference discloses drive electronics, either internally or in the form of an external electronic module. See col. 6, lines 16-25 of the reference.

Referring to claim 12, the Edwards et al. reference discloses all the limitations of the claimed invention. The Edwards et al. reference discloses a fiber optic cable (14). The Edwards et al. reference discloses the transmitting of light from an optical fiber to a light-receiving device. See col. 1, lines 15-24. It is inherent that such a optical receiver would be coupled to the other end of the optical fiber (14) for receiving the light from the optical transmitter (12).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,793,406 to Edwards et al. in view of U.S. Patent Application Publication No. 2004/0175072 to Lam et al.

Referring to claim 6, the Edwards et al. reference discloses all the limitations of the claimed invention, except the Edwards et al. reference does appear to specifically disclose that the reflective surface is from metal sputtering or reflective coating. The Lam et al. reference discloses a fiber optic coupling structure (Fig. 3 and Fig. 6) having a dielectric or metal coating for reflecting a portion of the light while allowing another portion of the light to be transmitted. See paragraph [0033] of the Lam et al. reference. Since the Lam et al. reference and the Edwards et al. reference are both from the same field of endeavor, the purpose disclosed by Lam et al. would have been recognized within the pertinent art of Edwards et al. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the reflective dielectric or metal coating disclosed by Lam et al., for the purpose of providing a reflective surface that allows the adjustment of the reflectivity, which determines the amount of the light beam that is transmitted and the amount to be reflected.



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9. Claims 14, 15 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,793,406 to Edwards et al. in view of U.S. Patent No. 6,921,214 to Wilson.

Referring to claim 14 and 26, the Edwards et al. reference discloses all the limitations of the claimed invention, except the Edwards et al. reference does not appear to specifically disclose an array of lenses fabricated from a single monolithic block. The Wilson reference discloses a plurality of lenses (120A-120D) where the transmissive lens regions (120A-120D) and the reflective regions (114,116) are integrated and formed from a single monolithic block, for the purpose of optically coupling an array of lasers (104A-104D) to an array of optical fibers (110A-110D). Since the Wilson reference and the Edwards et al. reference are both from the same field of endeavor, the purpose disclosed by Wilson would have been recognized within the pertinent art of Edwards et al. It would have been obvious to one having ordinary skill in the art at the time the invention was made to take the optical coupling arrangement taught by Edwards et al. duplicate it using an array of lenses fabricated from a single monolithic block, for the purpose of coupling a plurality of the light emitting sources with a plurality of the fiber optical cables.

Referring to claim 15, the Edwards et al. reference discloses that the transmissive region (39) is substantially circular in aperture. See Fig. 1 of the reference.

***Allowable Subject Matter***

10. Claim 13 is allowed.
11. Claims 3, 16-22, 24, and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
12. Claim 23 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
13. The following is a statement of reasons for the indication of allowable subject matter:

Referring to claims 3, 13, and 16-25, the prior art does not appear to disclose the reflective region substantially surrounding the transmissive region of the lens, where the transmissive region transmits and focuses light signals received from a light emitting source onto a fiber optic cable.

***Conclusion***

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin S. Wood whose telephone number is (571) 272-2364. The examiner can normally be reached on Monday-Thursday (7am - 5:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney B. Bovernick can be reached on (571) 272-2344. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Kevin S. Wood". The signature is fluid and cursive, with the first and last names being more prominent.

Kevin S. Wood  
Patent Examiner